# EECS 211:
## Fundamentals of
## Computer Programming II

## Syllabus

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**Northwestern University**

EECS 211
Fundamentals of Computer Programming II
March 29th, 2010

- Quarter
  - Spring 2010
- Lecture Time:
  - Monday/Tuesday/Wednesday/Friday
  - 1:00PM - 1:50PM
- Location:
  - TECH M164

# Introductions

- Instructor: Dr. Ioan Raicu
  - Contact: iraicu@eecs.northwestern.edu, 847-491-8163
  - Office Hours:
    - Time: Tuesday/Friday, 2:00PM - 3:00PM
    - Location: TECH M384



- Teaching Assistants:
  - Martin Luessi
    - Email: m-luessi@northwestern.edu
    - Office Hours:
      - Time: Wednesday/Thursday, 2:00PM - 3:00PM
      - Location: TECH M472



  - Fan Jiang
    - Email: fanjiang2008@u.northwestern.edu
    - Office Hours:
      - Time: Monday, 2:00PM - 4:00PM
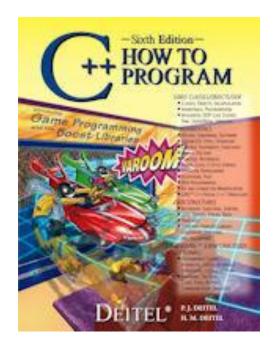      - Location: TECH M472

# Course Overview

- This class covers a variety of topics:
  - Introduction to UNIX
  - Introduction to C++
  - Object-oriented programming
  - Control structures
  - Functions
  - Abstract data types
  - Pointers
  - Classes
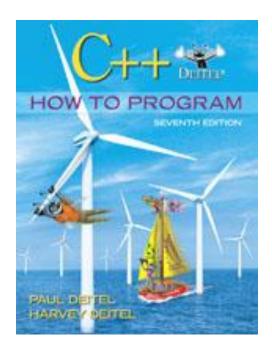- Required for computer science majors

# Prerequisites

- CS 111 or equivalent

- You should already understand basic concepts, such as:
  - variables and variable scope,
  - functions and function parameters,
  - iteration,
  - recursion,
  - simple data structures

# Required Texts

- C++ How to Program, 6th (or 7th) edition, by Deitel and Deitel

# Course Topics

- Introduction to C++
- Introduction to Makefiles
- Variables, types, and expressions
- C++ classes and control structures
- Functions
- Arrays and vectors

- Pointers
- Operators
- Classes
- Search and sorting
- Data structures
- Streams and files
- Strings

# Computer Usage

- Wilkinson Lab

- T-Lab machines
  - If you don't have accounts on these computers, but would like access, please email me iraicu@eecs.northwestern.edu to request access

# Software

- GNU C++
- Cygwin
- CppUnit
- MacPorts
- Makefiles
- Code::Blocks
- XCode
- Other:
    - http://www.eecs.northwestern.edu/~iraicu/teaching/EECS211/links.html

# Homeworks

- 8 programming assignments
  - Program 3 through 8 will be incremental
- Generally will have 1 week to complete
- Must be completed individually

# Mailing lists

- http://www.eecs.northwestern.edu/mailman/listinfo/eecs211
- Primary communication mechanism outside the classroom
- Post questions on the material or assignments, and to answer posted questions
- Posting to the newsgroup rather than emailing the staff will often get you an answer much faster
- If you need help on an error message, try to write a small program that replicates the error, and post that
- Never post complete answers to homeworks, even broken ones.
- You are encouraged to post useful or interesting links that are relevant to the class may also be posted

# Quizzes and Exams

- ## Quiz 1
  - Friday, 04-09-2010

- ## Quiz 2
  - Friday, 04-23-2010

- ## Quiz 3
  - Friday, 05-07-2010

- ## Quiz 4
  - Friday, 05-21-2010

- ## Final Exam
  - Week of 06-07-2010

# Grading

- Final grade composed of:
  - 8 Programming Assignments – 50%
  - 4 In-class quizzes – 25%
  - 1 Final – 25%

- General grade guidelines:

| | | | | |
|---|---|---|---|---|
| A | 93% - 100% | | C | 73% - 76.9% |
| A- | 90% - 92.9% | | C- | 70% - 72.9% |
| B+ | 87% - 89.9% | | D+ | 67% - 69.9% |
| B | 83% - 86.9% | | D | 63% - 66.9% |
| B- | 80% - 82.9% | | D- | 60% - 62.9% |
| C+ | 77% - 79.9% | | F | 0% - 59.9% |

# Getting Help

- Participate in class and ask lots of questions.

- Post to the mailing list. Posting your questions there will usually get you an answer much faster than if you email them to us, or wait until class/office hours.

- Email or visit the instructor. When emailing, always put "[EECS211]" in the Subject line, followed by a short but clear topic.

- Check the course web pages for updates.

- Study early and start assignments early. The last minute is the worst time to need help.

# Tardiness

- You will generally have 1 week to complete most assignment
- They will be due
  - 11:59PM on Monday nights
  - There will be a 1 hour grace period
- Late assignments will receive 0
- Your lowest grade from the 8 programming assignments will be dropped

# Plagiarism

- You must **never** copy solutions from any source or give your homework to another student
- **Cheating will result in a failing grade for the course**
- University policy requires that instances of cheating be reported to the Dean
- You are allowed and encouraged to discuss the programming assignments
  - This means asking for suggestions when you are stuck and discussing examples that are similar but not part of the exercise
  - You must never share code or solutions to the assigned problems.

# Questions

- Write me:
    - iraicu@eecs.northwestern.edu
- Call me:
    - 1-847-491-8163
- Write the TAs:
    - m-luessi@northwestern.edu
    - fanjiang2008@u.northwestern.edu
- Mailing list
    - http://www.eecs.northwestern.edu/mailman/listinfo/eecs211